

**METHOD AND APPARATUS FOR PROTECTING
DEVICES IN AN RF POWER AMPLIFIER**

CROSS REFERENCE TO RELATED APPLICATIONS

5 [01] The following U. S. patent application is expressly incorporated herein by
reference: Serial No. 09/842,456, entitled "RF POWER DETECTOR" by Timothy J.

Dupuis et al, filed on April 26, 2001, which is a continuation-in-part of United States
application serial number 09/660,123, filed on September 12, 2000, entitled "POWER
AMPLIFIER CIRCUITRY AND METHOD".
now U.S. Pat. No. 6,549,071
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FIELD OF THE INVENTION

[02] This invention relates to the field of power amplifiers. More particularly, this
invention relates to circuitry for protecting devices in an RF power amplifier.

15 **BACKGROUND OF THE INVENTION**

[03] In some applications utilizing a power amplifier, it is desirable to limit peak
voltages to which active devices of the power amplifier are subjected. For example, in
CMOS devices, the transistor breakdown voltage may be only slightly greater than the
supply voltage. In RF power amplifiers, high peak voltages can be caused by load
20 mismatches, temperature extremes, and device variations, for example. High peak
voltages are capable of causing breakdown of the active devices, which can lead to
reliability problems.